IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A light transmitter comprising:

a packaged laser diode having a first thermal contacting portion which can come in thermal contact with an external device; and

an exothermic-effect-only heat source provided on said first thermal contacting portion and having a second thermal contacting portion capable of coming in thermal contact with the external device, wherein a wavelength of light oscillated by said laser diode is controlled by heat radiated from said exothermic-effect-only heat source.

2. (Original) The light transmitter according to claim 1, further comprising a heat detector provided on said first thermal contacting portion.

3 (Canceled).

4. (Original) The light transmitter according to claim 2, wherein a wavelength of light oscillated from said laser diode is controlled by heat radiated by said exothermic-effect-only heat source.

5. (Original) The light transmitter according to claim 1, wherein said exothermic-effect-only heat source is a transistor.

6. (Original) The light transmitter according to claim 2, wherein said exothermic-effect-only heat source is a transistor.

7. (Original) The light transmitter according to claim 1, wherein a package of said laser diode is a coaxial type package.

8. (Original) The light transmitter according to claim 2, wherein a package of said laser diode is a coaxial type package.

9. (Original)The light transmitter according to claim 1, wherein a package of said laser diode is a Mini-DIL type package.

10. (Original) The light transmitter according to claim 2, wherein a package of said laser diode is a Mini-DIL type package.

11. (Original) A light transfer system comprising:

a plurality of slave stations each of which is equipped with the light transmitter according to claim 1 which outputs an optical signal corresponding to an information signal, each of said plurality of slave stations including a wavelength controller which controls a wavelength of the optical signal output from the laser diode of said light transmitter by adjusting an amount of heat radiated from an exothermic-effect-only heat source of said light transmitter; and

a master station which receives an optical multiplex signal obtained by optically multiplexing the optical signals from said plurality of slave stations.

12. (Original) The system according to claim 11, wherein:

said master station is equipped with a detector which detects optical beat noise from said received optical multiplex signal;

said master station outputs a wavelength control signal to control the wavelength of the laser diode of said light transmitter based on an output result of said detector; and

said wavelength controller of each of said plurality of slave stations controls the wavelength of the optical signal output from said laser diode corresponding to said wavelength control signal received in order to suppress said optical beat noise.

13. (Original) The system according to claim 12, wherein:

said wavelength controller is equipped with a temperature measuring device which measures a temperature of said laser diode to then output a temperature information signal;

said plurality of slave stations transmits to said master station said optical signal that also corresponds to said temperature information signal;

said master station is equipped with a temperature information receiver which receives said temperature information signal; and

said master station outputs to said plurality of slave stations said wavelength control signal to control the wavelength of said laser diode, based on output results of said detector and said temperature information receiver.

14. (Original) The system according to claim 11, wherein said plurality of slave stations is each equipped with an antenna, through which said information signal is received as a radio signal.

15. (Original) The system according to claim 11, wherein:

said plurality of slave stations is each equipped with a frequency converter; and

said information signal has a frequency thereof converted by said frequency converter into a frequency band which is different with each of said plurality of slave stations, so that

the optical signal corresponding to a signal having the thus converted frequency is transferred to said master station in optical sub-carrier multiplexing access.